

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,269	12/28/2001	Axel Schumacher	R.35853	4016
2119	7590 07/29/2003			
RONALD E. GREIGG			EXAMINER	
GREIGG & GREIGG P.L.L.C. 1423 POWHATAN STREET, UNIT ONE ALEXANDRIA, VA 22314		3	SY, MARIANO ONG	
			ART UNIT	PAPER NUMBER
			3683	
			DATE MAILED: 07/29/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
1	10/019,269	SCHUMACHER, AXEL				
Office Action Summary	Examiner	Art Unit				
	Mariano Sy	3683				
The MAILING DATE of this communication Period for Reply	on appears on the cover sheet with the	e correspondence address				
A SHORTENED STATUTORY PERIOD FOR F THE MAILING DATE OF THIS COMMUNICAT - Extensions of time may be available under the provisions of 37 of after SIX (6) MONTHS from the mailing date of this communicat - If the period for reply specified above is less than thirty (30) days - If NO period for reply is specified above, the maximum statutory - Failure to reply within the set or extended period for reply will, by - Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	ION. CFR 1.136(a). In no event, however, may a reply be ion. i, a reply within the statutory minimum of thirty (30) of period will apply and will expire SIX (6) MONTHS from the statute, cause the application to become ABANDOI	timely filed lays will be considered timely. om the mailing date of this communication. NED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed or	n					
2a)⊠ This action is FINAL. 2b)□	This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims						
4)⊠ Claim(s) <u>8-25</u> is/are pending in the appli	cation.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>8-25</u> is/are rejected.						
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restriction	and/or election requirement					
Application Papers	ana, et e e e e e e e e e e e e e e e e e e	•				
9) ☐ The specification is objected to by the Exa	aminer.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by t	ne Examiner.	•				
Priority under 35 U.S.C. §§ 119 and 120	•					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received:						
2. Certified copies of the priority docu	2. Certified copies of the priority documents have been received in Application No					
 Copies of the certified copies of the application from the Internation See the attached detailed Office action for 		•				
14) ☐ Acknowledgment is made of a claim for do	mestic priority under 35 U.S.C. § 119	e(e) (to a provisional application).				
 a) The translation of the foreign language 15) Acknowledgment is made of a claim for do 	ge provisional application has been re	eceived.				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-94 3) Information Disclosure Statement(s) (PTO-1449) Paper N	8) 5) Notice of Informa	ary (PTO-413) Paper No(s) al Patent Application (PTO-152)				
S. Patent and Trademark Office TO-326 (Rev. 04-01) Offi	ice Action Summary	Part of Paper No. 8				

Application/Control Number: 10/019,269 Page 2

Art Unit: 3683

DETAILED ACTION

1. The amendment filed on May 27, 2003 has been received.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 8-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites "that any reduction of the braking force is imperceptible" in lines

8-9. It is unclear with the word "imperceptible" as to what applicant is referring to.

Claim 9 recites "that any reduction of the force exerted is imperceptible" in lines

6-7. It is unclear with the word "imperceptible" as to what applicant is referring to.

Claim 20 recites "that any reduction of the braking force is imperceptible" in lines

9-10. It is unclear with the word "imperceptible" as to what applicant is referring to.

Claim 23 recites the limitation "the wheel brake assembly" in lines 1-2. It is unclear if applicant is referring to --the electric motor--.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Application/Control Number: 10/019,269 Page 3

Art Unit: 3683

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 8-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Schenk et al. (U.S. Patent Number 5,090,518).

Re-claims 8, 10, 12, 14, 16, and 18 Schenk et al. discloses a method for actuating a wheel brake assembly, comprising the steps of (a) initially actuating the brake assembly in a tightening direction to cause a brake lining to be pressed against a brake body to establish a quasi-static terminal braking state, then (b) actuating the brake assembly for a brief period of time in a release direction opposite the tightening direction, and then (c) again actuating the brake assembly in the tightening direction. said brief period of time of the actuation in the release direction being selected to be so short that any reduction of the braking force is imperceptible; repeating steps (a) and (b); wherein steps (b) and (c) are repeated after a predetermined period of time after the onset of the re-tightening; wherein steps (b) and (c) are repeated when the brake assembly comes to a stop upon re-tightening; wherein number of repetitions of steps (b) and (c) is limited; wherein said brief period of time during which the brake assembly is actuated in the release direction is defined by a travel distance by which an actuating element of the brake assembly is moved in the release direction. The method recited is relatively broad and appears to read on the well-known anti-lock brake system of Schenk et al. wherein the brakes are actuated and released intermittently and/or repeatedly in a brief period of time so as the wheel does not slip or lock on different road surface conditions, see col. 2, lines 56-68 and col. 3, lines 1-20.

Art Unit: 3683

Re-claims 9, 11, 13, 15, 17, and 19 Schenk et al. discloses a method for actuating a mechanical system that pressed against the friction element is readable as involving friction and having a spring elasticity to increase a force exerted by the system beyond a force attainable in a quasi-static state, comprising the steps of (a) actuating the system for a brief period of time in a release direction and then (b) tightened, the period of time of the actuation in the release direction being selected to be so short that any reduction of the force exerted is imperceptible; repeating steps (a) and (b); wherein steps (a) and (b) are repeated after a predetermined period of time after the onset of the re-tightening; wherein steps (a) and (b) are repeated when the system comes to a stop upon re-tightening; wherein number of repetitions of steps (a) and (b) is limited; wherein said brief period of time during which the system is actuated in the release direction is defined by a travel distance by which an actuating element of the system is moved in the release direction. The method recited is relatively broad and appears to read on the well-known anti-lock brake system of Schenk et al. wherein the brakes are actuated and released intermittently and/or repeatedly in a brief period of time so as the wheel does not slip or lock on different road surface conditions, see col. 2, lines 56-68 and col. 3, lines 1-20.

Re-claims 20-25 Schenk et al. discloses a method for actuating an electromechanical wheel brake assembly having an electric motor 28,38, a brake actuator and means 34,44 connecting the motor to the brake actuator into a translational motion, the method comprising the steps of (a) initially actuating the motor in a tightening direction to cause a brake actuator to be pressed against a brake body to

Page 5

Art Unit: 3683

establish a quasi-static terminal braking state, then (b) actuating the motor for a brief period of time in a release direction opposite the tightening direction, and then (c) again actuating the motor in the tightening direction, said brief period of time of the actuation in the release direction being selected to be so short that any reduction of the braking force is imperceptible; repeating steps (a) and (b); wherein steps (b) and (c) are repeated after a predetermined period of time after the onset of the re-tightening: wherein steps (b) and (c) are repeated when the brake assembly comes to a stop upon re-tightening; wherein number of repetitions of steps (b) and (c) is limited; wherein said brief period of time during which the brake assembly is actuated in the release direction is defined by a travel distance by which an actuating element of the brake assembly is moved in the release direction. The method recited is relatively broad and appears to read on the well-known anti-lock brake system of Schenk et al. wherein the brakes are actuated and released intermittently and/or repeatedly in a brief period of time so as the wheel does not slip or lock on different road surface conditions, see col. 2, lines 56-68 and col. 3, lines 1-20.

6. Applicant's arguments filed on May 27, 2003 have been fully considered but they are not persuasive.

Examiner maintains the rejection is proper. The claim language of the method recited in claims 8, 9, and 20 are relatively broad and appear to read on the anti-lock brake system of Schenk et al., see col. 2, lines 56-68 and col. 3, lines 1-20. The method for actuating a brake assembly, as claimed, is readable on a typical anti-lock brake system

Application/Control Number: 10/019,269

Art Unit: 3683

wherein the brakes are actuated and released intermittently and/or repeatedly in a brief period of time, so as the wheel will not slip or lock on different road surface conditions and to maintain a constant deceleration. In claim 9 Schenk et al. brake system having a mechanical connection that pressed against the friction element which is readable as having a spring elasticity which is a relatively broad term. Applicant's argument is more specific than the claim language.

Page 6

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication should be directed to Mariano Sy at

telephone number 703-308-3427.

^لጣ M. Sy

July 24, 2003